

Zip2R: EE2Xzip.IL2Rb.2A.RR2Xzip.IL2Rg.2A.mClover

Amino acid Sequence:

RED: Leader Sequence

Blue: FLAG tag

ORANGE: EE leucine zipper

Purple: linker

BROWN: IL2R beta (*extracellular*, transmembrane, *intracellular*)

GREY: 2A

GREEN: MYC tag

PINK: RR leucine zipper

BLACK: IL2R gamma (*extracellular*, transmembrane, *intracellular*)

DARK RED: mClover3

MDWIWRILFLVGAATGAHS

DYKDDDDK

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

GGGSGGGGSGGGGS

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

PLAFRTKPAALGKDTIPWLGHLLVGLSGAFGFIILVYLLINCRNTGPWLKKVLKCNTPDPSKFF

SQLSSEHGGDVQKWLSSFPSSSFSPGGLAPEISPLEVLERDKVTQLLLQQDKVPEPASLSSNH

SLTSCFTNQGYFFFHLPDALEIEACQVYFTYDPYSEEDPDEGVAGAPTGSSPQPLQPLSGEDDA

YCTFPSRDDLLLFSPSLGGPSPSTAPGGSGAGEERMPPSLQERVPRDWDQPPLGPPTPGVPD

LVDFQPPPELVLREAGEEVPDAGPREGVSFPWSRPPGQGEFRALNARLPLNTDAYLSLQELQGG

DPTHLV

GSGATNFSLLKQAGDVEENPGP

MDWIWRILFLVGAATGAHS

EQKLISEEDL

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

GGGSGGGGSGGGGS

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

SNTSKENPFLFALEAVVISVGSMLIISLLCVYFWLERTMPRIPTLKNLEDLVTEYHGNSAWS

GVSKGLAESLQPDYSERLCLVSEIPPKGGALGEGPGASPCNQHSPYWAPPCYTLKPET

GSGATNFSLLKQAGDVEENPGP

MVSKGEELFTGVVPIVELDGDVNGHKFSVRGEGEGDATNGKLTTLKFICTTGKLPVPWPTLVTT

FGYGVACFSRYPDHMKQHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEEDTLVNRIELKG

IDFKEDGNILGHKLEYNFNHYVYITADKQKNCIKANFKIRHNVEDGVSQVLADHYQQNTPIGDG

PVLLPDNHYLSHQSKLSKDPNEKRDHMLLEFVTAAGITHGMDELYK

Zip7R: EE2Xzip.IL7Ra.2A.RR2Xzip.IL2Rg.2A.mClover

Amino acid Sequence:

RED: Leader Sequence

Blue: FLAG tag

ORANGE: EE leucine zipper

Purple: linker

BROWN: IL7R alpha (*extracellular*, transmembrane, intracellular)

GREY: 2A

GREEN: MYC tag

PINK: RR leucine zipper

BLACK: IL2R gamma (*extracellular*, transmembrane, intracellular)

DARK RED: mClover3

MDWIWRILFLVGAATGAHS

DYKDDDDK

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

YFRTPEINNSSGEMDPILLTISILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKTLEHLCK

KPRKNLNVSFNPESFLDCQIHRVDDIQARDEVEGFLQDTFPQQLEESEKQRLGGDVQSPNCPSE

DVVITPESFGRDSSLTCLAGNVSACDAPILSSSRSLDCRESGKNGPHVYQDLLLLSLGTTNSTLP

PPFSLQSGILTLPVAQGPILTSLGSNQEAYVTMSSFYQNQ

GSGATNFSLLKQAGDVEENPGP

MDWIWRILFLVGAATGAHS

EQKLISEEDL

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

SNTSKENPFLFALEAVVISVGSMLIISLLCVYFWLERTMPRIPTLKNLEDLVTEYHGNFSAWS

GVSKGLAESLQPDYSERLCLVSEIPPKGGALGEGPGASPCNQHSPYWAPPCYTLKPET

GSGATNFSLLKQAGDVEENPGP

MVSKGEELFTGVVPILEVELDGDVNGHKFSVRGEGEGDATNGKLTCLKFICTTGKLPVPWPPTLVTT

FGYGVACFSRYPDHMKQHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEGDTLVNRIELKG

IDFKEDGNILGHKLEYNFNHYVYITADKQKNCIKANFKIRHNVEDGSVQLADHYQQNTPIGDG

PVLLPDNHYLSHQSKLSKDPNEKRDHMLLEFVTAAGITHGMDELYK

Zip12R: EE2Xzip.IL12Rb1.2A.RR2Xzip.IL12Rb2.2A.mClover

Amino acid Sequence:

RED: Leader Sequence

Blue: FLAG tag

ORANGE: EE leucine zipper

Purple: linker

BROWN: IL12R beta 1 (*extracellular*, transmembrane,
intracellular)

GREY: 2A

GREEN: MYC tag

PINK: RR leucine zipper

BLACK: IL12R beta 2 (*extracellular*, transmembrane,
intracellular)

DARK RED: mClover3

MDWIWRILFLVGAATGAHS

DYKDDDDK

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRSQYRTRYGPLGGGK

GGGGSGGGGSGGGGS

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRSQYRTRYGPLGGGK

*WSQPQRF*SIEVQVSDWLIFFASLGSFLSILLVGVLGVLGLNRRAARHLCPPLPTPCASSAIEFPG

GKETWQWINPVDFQEEASLQEALVEMSWDKGERTEPLEKTELPEGAPELALDTELSLEDGDRC

KAKM

GSGATNFSLLKQAGDVEENPGP

MDWIWRILFLVGAATGAHS

EQKLISEEDL

MDPDLEIRAAFLRQNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

GGGGSGGGGSGGGGS

MDPDLEIRAAFLRQNTALRTEVAELEQEVQRLENEVSQYETRYGPLGGGK

*SHGN*EREFCLQGKAMWMAFVAPSICIAIIMVGIFSTHYFQQKVFVLLAALRPQWCSREIPDPAN

STCAKKYPIAEEKTQLPLDRLLDWPTPEDPEPLVISEVLHQVTPVFRHPPCSNWPQREKGIQG

HQASEKDMMSASSPPPPRALQESRQLVDLYKVLESRGSDPKPENPACPWTVLPAGDLPTHDG

YLPSNIDDLPSHEAPLADSLEELEPQHISLSVFSSSLHPLTFSCGDKLTLDQLKMRCDSLML

GSGATNFSLLKQAGDVEENPGP

MVSKGEELFTGVVPILVELDGDVNGHKFSVRGEGEGDATNGKLTLKFICTTGKLPVPWPTLVTT

FGYGVACFSRYPDHMKQHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEGDTLVNRIELKG

IDFKEDGNILGHKLEYNFNSHYVYITADKQKNCIKANFKIRHNVEDGSVQLADHYQONTPIGDG

PVLLPDNHYLSHQSKLSKDPNEKRDHMLLEFVTAAGITHGMDELYK

Zip10R: EE2Xzip.IL10Ra.2A.RR2Xzip.IL10Rb.2A.mClover

Amino acid Sequence:

RED: Leader Sequence

Blue: FLAG tag

ORANGE: EE leucine zipper

Purple: linker

BROWN: IL10R alpha (*extracellular*, transmembrane, intracellular)

GREY: 2A

GREEN: MYC tag

PINK: RR leucine zipper

BLACK: IL10R beta (*extracellular*, transmembrane, intracellular)

DARK RED: mClover3

MDWIWRILFLVGAATGAHS

DYKDDDDK

MDPDLEIEAAFLERENTALET RVAELRQRVQRLRN RVSQYRTRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIEAAFLERENTALET RVAELRQRVQRLRN RVSQYRTRYGPLGGGK

EECISLTRQYFTVTNVI IFFAFVLLLSGALAYCLALQLYVRRRKKLPSVLLFKKPSPFIFISQR

PSPETQDTIHPLDEEAFLKVSPELKNLDLHGSTDSGFGSTKPSLQTEEPQFLLPDPHPQADRTL

GNREPPVLGDSCSSGSSNSTDSGICLQEPSPSTGPTWEQQVGSNSRGQDDSGIDL VQNSEGR

AGDTQGGALGHHSPEPEVPGEEDPAAVAFQGYLRQTRCAEEKATKTGCLEESPLTDGLGPK

FGRCLVDEAGLHPPALAKGYLKQDPLEMTLASSGAPTQWNQPTTEWSSLALSSCSDLGISDWS

FAHDLAPLGCVAAPGGLLGSFNSDLVTLPLISSLQSSE

GSGATNFSLLKQAGDVEENPGP

MDWIWRILFLVGAATGAHS

EQKLISEEDL

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEV SQYETRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIRAAFLRQRNTALRTEVAELEQEVQRLENEV SQYETRYGPLGGGK

EPVCEQTTHDET VPSWMAVILMASVFMVCLALLGCFALLWCVYKKTKYAFSPRNSLPQHLKEF

LGHPHNTLLFFSFPLSDENDVFDKLSVIAEDS

ESGKQNP GDSCSLGT PPGQPQS

GSGATNFSLLKQAGDVEENPGP

MVSKGEELFTGVVPI LVELDGDVNGHKFSVRGEGEGDATNGKLT LKFICTTGKLPVPWPTLVTT

FGYGVACFSRYPDHMKQHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEGDTLVNRIELKG

IDFKEDGNILGHKLEYNFN SHYVYITADKQKNC I KANFKIRHNVEDG SVQLADHYQQNTPIGDG

PVLLPDNHYL SHQSKLSKDPNEKRDMVLL E FVTAAGITHGMDELYK

Zip22R: EE2Xzip.IL22Ra.2A.RR2Xzip.IL10Rb.2A.mClover

Amino acid Sequence:

RED: Leader Sequence

Blue: FLAG tag

ORANGE: EE leucine zipper

Purple: linker

BROWN: IL22R alpha (*extracellular*, transmembrane, intracellular)

GREY: 2A

GREEN: MYC tag

PINK: RR leucine zipper

BLACK: IL10R beta (*extracellular*, transmembrane, intracellular)

DARK RED: mClover3

MDWIWRILFLVGAATGAHS

DYKDDDDK

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIEAAFLERENTALETRVAELRQRVQRLRNRVSQYRTRYGPLGGGK

PYMCRVKTLPDRTWYSEFSGAFLFSMGFLVAVLCYLSYRYVTKPPAPPNSLNVQRVLTFQPLRF

IQEHVLIPIVFDLSGSPSSLAQPVQYSQIRVSGPREPAGAPQRHSLSEITYLGQPDISILQPSNVP

PPQILSPLSYAPNAAPEVGPSSYAPQVTPEAQFPFYAPQAIKQVQSSYAPQATPDSWPSSYGV

CMEGSGKDSPTGTLSSPKHLRPGQLQKEPPAGSCMLGGLSLQEVTSLAMEESQEAKSLHQPLG

ICTDRSDPNVLHSGEETPQYLKQQLPLLSSVQIEGHPMSLPLQPPSRPCSPSDQGPPSWGLL

ESLVCPKDEAKSPAPETSDLEQPTELDSLFRGLALTVQWESGSGATNFSLLKQAGDVEENPGP

MDWIWRILFLVGAATGAHS

EQKLISEEDL

MDPDLEIRAAFLRQRNTALRTEVAELEQEVRLENEVSQYETRYGPLGGGK

GGGSGGGSGGGGS

MDPDLEIRAAFLRQRNTALRTEVAELEQEVRLENEVSQYETRYGPLGGGK

EPVCEQTTHDETVPSWMAVILMASVFMVCLALLGCFALLWCVYKKTKYAFSPRNSLPQHLKEF

LGHPHNTLLFFSFPLSDENDVFDKLSVIAEDS

ESGKQNP GDSCSLGTPPGQPQS

GSGATNFSLLKQAGDVEENPGP

MVSKGEELFTGVVPIVVELDGDVNGHKFSVRGEGEGDATNGKLTTLKFICTTGKLPVPWPTLVTT

FGYGVACFSRYPDHMKQHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEEDTLVNRIELKG

IDFKEDGNILGHKLEYNFNHYVYITADKQKNCIKANFKIRHNVEDGVSQVLADHYQQNTPIGDG

PVLLPDNHYLSHQSKLSKDPNEKRDHMLLEFVTAAGITHGMDELYK